


Application Serial No.: 09/667,502
Amendment dated July 15, 2003
Reply to Office Action dated April 15, 2003

REMARKS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 1-19 are presently active in this case, Claims 1, 5, 6, 15, and 16 having been amended by way of the present Amendment and Claims 4, 9-14, and 19 having been withdrawn from consideration.

In the outstanding Official Action, Claims 1-3, 5-8, and 15-18 were rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. Specifically, the Official Action indicates that "means of the probe" recited in Claims 1, 5, and 6, and "means of the pressure sensor" recited in Claims 15 and 16 are not defined in the specification. The Applicants respectfully traverse this rejection and note the description on page 8, line 15, and page 20, line 23, of the specification for support for the terminology used in the claims. The Applicants submit that the claim language is being misinterpreted to include an element in addition to the probe when the phrase "by means of the probe" is recited and an element in addition to the sensor when the phrase "by means of the sensor" is recited. Accordingly, Claims 1, 5, 6, 15, and 16 have been amended to change "by means of" to "using," thereby removing the "by means of" language and clarifying that no additional element is intended. The Applicants submit that the scope of the claims has not changed based upon these amendments.



Application Serial No.: 09/667,502
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The Applicants respectfully request the withdrawal of the rejection under 35 U.S.C. 112, first paragraph.

Claims 1-3, 5-8, and 15-18 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Official Action indicates that the phrase "by means of the probes" and the phrase "by means of the pressure sensor" are unclear. As noted above, Claims 1, 5, 6, 15, and 16 have been amended to change "by means of" to "using," thereby removing the "by means of" language. The Applicants submit that the scope of the claims has not changed based upon these amendments. The Applicants respectfully request the withdrawal of the indefiniteness rejections. djm

Claims 1-3, 5-8, and 15-18 were rejected under 35 U.S.C. 103(a) as being unpatentable over Nakajima et al. (U.S. Patent No. 5,642,056) in view of Fumitaka (JP 07-066269). For the reasons discussed below, the Applicants request the withdrawal of the obviousness rejection.

The Applicants submit that a *prima facie* case of obviousness has not been established in the present case because the references, either taken singularly or in combination, do not teach or suggest all of the claim limitations. (See MPEP 2143.)

The pending claims of the present application are rejection as being obvious over the combination of the Nakajima et al. reference and the Fumitaka reference. However, the Applicants respectfully submit that the cited references are directed to inventions that are clearly distinguishable in both structure and operation.

The Nakajima et al. reference describes "a tilt correcting unit 51 serves as means for

Application Serial No.: 09/667,502
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detecting and correcting the tilting of the probe tip profile of the probe card 22.” (See col. 6, lines 41-43.) In other words, the subject of detection in the Nakajima et al. reference is the titling of the probe tip profile, and the subject of correction is the titling of the probe card 22. In contrast, in the present invention the subject of detection is “a load applied to the main chuck,” as recited in independent Claims 1, 5, and 15, or “a load applied to the object of inspection,” as recited in independent Claims 6 and 16, and the subject of control is “the movement of the main chuck,” as recited in independent Claims 1, 5, 6, 15, and 16. As can be understood from the above, both the subject of detection and the subject of control of the present invention differ from those of the Nakajima et al. reference. Arg. 1

The Fumitaka reference relates to fabrication machines that take up from a wafer sheet a semiconductor device obtained by carrying out cutting separation of the semiconductor wafer. The invention of the Fumitaka reference is not a probe apparatus. The subject of detection in Fumitaka is not “a load applied to the main chuck” or “a load applied to the object of inspection,” and the subject of control is not “the movement of the main chuck.”

The Fumitaka reference describes machines that detect the load when the needle 17 comes into contact with the chip 14. However, unlike the present invention as recited in Claims 1, 5, and 15, it does not measure the load acting on the mounting table. Arg. 2

Additionally, unlike the present invention as recited in Claims 1, 5, 6, 15, and 16, the Fumitaka reference does not describe controlling the movement of the main chuck. In fact, the Fumitaka reference does not describe moving the mounting table. Further, unlike the present invention, it does not describe controlling the amount of overdriving of the main Arg. 3

Application Serial No.: 09/667,502
Amendment dated July 15, 2003
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chuck such that a predetermined load is applied to the main chuck.

The Nakajima et al. reference merely describes detection of the tilt of the probe at its tip level by a displacement sensor at the time of setting the probe card. The Nakajima et al. reference describes tilting the probe card along the curve of the wafer. (See col. 13, lines 40-53.) However, unlike the present invention, it does not disclose the problem of distortion of the mounting table by the probe pressure, nor does it disclose that the problem is solved by obtaining the distortion of the mounting table. To the contrary, Claim 16 of the present application recites "a controller for obtaining a distortion of the main chuck in accordance with a position where the probes touches the object of inspection and the load measured using the pressure sensor," which is clearly not disclosed in either of the cited references.

Therefore, the present invention cannot be constructed in the manner suggested in the Official Action even if the Nakajima et al. reference and the Fumitaka reference are combined.

Accordingly, the Applicants respectfully request the withdrawal of the obviousness rejection.

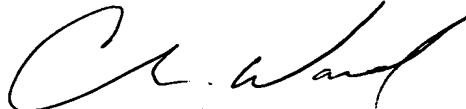
Claims 2, 3, 7, 8, 17, and 18 are considered allowable for the reasons advanced for Claims 1, 5, 15, and 16 from which they depend. These claims are further considered allowable as they recite other features of the invention that are neither disclosed, taught, nor suggested by the applied references when those features are considered within the context of Claims 1, 5, 15, and 16.

Application Serial No.: 09/667,502
Amendment dated July 15, 2003
Reply to Office Action dated April 15, 2003

Consequently, in view of the above discussion, it is respectfully submitted that the present application is in condition for formal allowance and an early and favorable reconsideration of this application is therefore requested.

Respectfully Submitted,

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